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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION  
EPA CONTRACT 68 WO 0036

### MEMORANDUM

TO Jack Owens, OSC, Region III  
Eastern Response Section (3HW31)

FROM TAT Region III TDD 9410-0145  
PCS 1145

SUBJECT Trip Report  
Bishop Tube  
Frazer, Chester County, PA

DATE January 10, 1995

### OBJECTIVE

The objective of this sampling event was to ascertain the possible presence of Volatile Organic Compounds (VOC's) and/or metals at the Bishop Tube Company property

### BACKGROUND

The Bishop Tube Company Site (Site) is located on Malin Road, south of Route 30 in the Borough of Frazer, Chester County, Pennsylvania. The Site consists of a 13.7 acre parcel of land containing a 500,000 square foot plant, two inactive former surface impoundments and a former degreaser unit (which consists of an above-ground solvent storage tank and an underground degreaser tank).

The Site was established in 1951 as J. Bishop and Company Platinum Works for processing platinum. In 1967 the company name changed to Matthay Bishop and Company and began production of stainless steel industrial seamless tubing. The Site was bought by Wittaker Corporation and also operated in making stainless steel industrial seamless tubing from 1969 until 1974. Since 1974, the owner has been Christiana Metals Corporation.

In October 1981, Betz, Converse and Murdoch, Inc (BMC, Inc ) conducted a hydrogeologic investigation under a contract with Christiana Metals Corporation in order to determine the impact, if any, of two surface impoundments on groundwater at the Site. During the investigation, elevated levels of Volatile Organic Compounds (VOC's) were detected in the groundwater. In 1988, BCM Inc determined that the soil and groundwater contamination was most likely caused by leakage in the on-site degreaser system on-site. The report concluded that soil contamination resulted from the upward migration of contaminants in the shallow water table. The plant subsequently closed in 1991.

The business was purchased at an auction by the Damascus-Bishop Tube Company, a subsidiary of the Marcegaglia Group, in December 1992. Damascus-Bishop Tube Company leased the property from Christiana Metals Corporation. Operations at the Site resumed in Spring of 1993. Sixteen monitoring wells were installed on and around the site for groundwater monitoring and investigation. A Site Inspection Prioritization Investigation focused on the groundwater and surface water pathways for contamination. Several volatile organic compounds were detected in both shallow and deep groundwater downgradient of the former degreaser system. The VOC's included 1,1,1-trichloroethane, tetrachloroethylene and trichloroethene. Manganese was also detected in the groundwater beneath the site. Surface water and sediments at the site were found to contain elevated levels of the metals manganese, nickel and zinc.

#### ACTIONS TAKEN

On November 21, 1994, TAT members (b) (4) met OSC Owens and a representative for Bishop Tube, BCM Engineer (b) (4). Five soil sampling locations were identified by OSC Owens, and TAT proceeded to collect the samples (see sampling map for location of collect points). All samples were split and received by Mr. Randall.

Samples were placed in 8 oz glass jars for analysis for Target Analyte List (TAL) metals (SW 846 Methods), and in 4 oz soil VOA jars for analysis of VOC's (EPA Method 8240). One field blank was also taken for laboratory analysis of both parameters.

#### ANALYTICAL RESULTS

Five samples were taken around the east side of the building S-1 through S-5. See sampling map for locations.

The Volatile Organic results for all five samples were non-detect, with the exception of sample S-1, which exhibited 6 ppb of acetone and sample S-2, which exhibited 2 ppb of acetone.

A summary chart of the TAL metal results is presented below All results are in parts per million (ppm)

After QA/QC review of the analytical package the following qualifications were made to the data Arsenic, nickel, and zinc results should be considered biased low, cobalt results should be considered biased high, and the aluminum, iron, copper and lead results should be considered approximate

Metal	S-1	S-2	S-3	S-4	S-5
Aluminum	5350	725	4930	8200	6950
Antimony	ND	ND	ND	ND	ND
Arsenic	6 0	ND	2 1	5 0	2 8
Barium	41 3	5 1	24 0	38 2	26 2
Beryllium	0 44	0 34	0 35	2 0	ND
Cadmium	ND	ND	ND	ND	ND
Calcium	56900	204000	108000	10100	54400
Chromium	138	49 2	102	153	86
Cobalt	13 9	ND	6 8	15 7	9 4
Copper	47 6	ND	24 9	80 3	22 7
Iron	26900	3670	18900	26900	23300
Lead	56 0	4 0	90 6	15 8	95 2
Magnesium	30800	123000	52500	6970	21700
Manganese	779	257	477	693	489
Mercury	0 05	ND	0 05	0 05	ND
Nickel	130	41 8	142	256	103
Potassium	226	74 8	397	333	660
Selenium	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND
Sodium	ND	90 9	ND	ND	ND
Thallium	ND	ND	ND	ND	ND
Vanadium	24 2	1 4	6 2	16 9	7 5
Zinc	230	17 5	80 3	395	69 3

## CONCLUSIONS

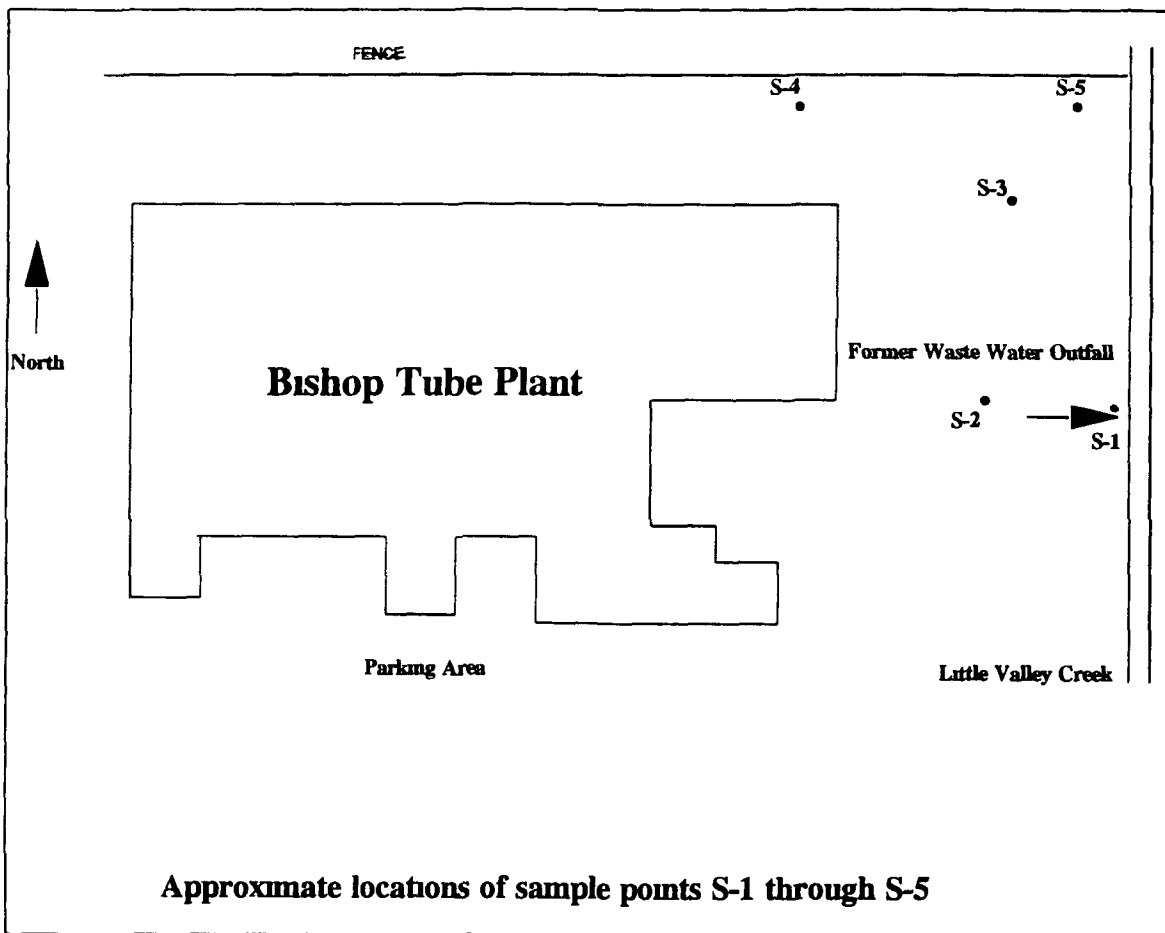
The results of these surface soil samples do not indicate that an immediate or potential threat to human health or the environment exists at the Site

Attachments  
Sample Map  
Location Map

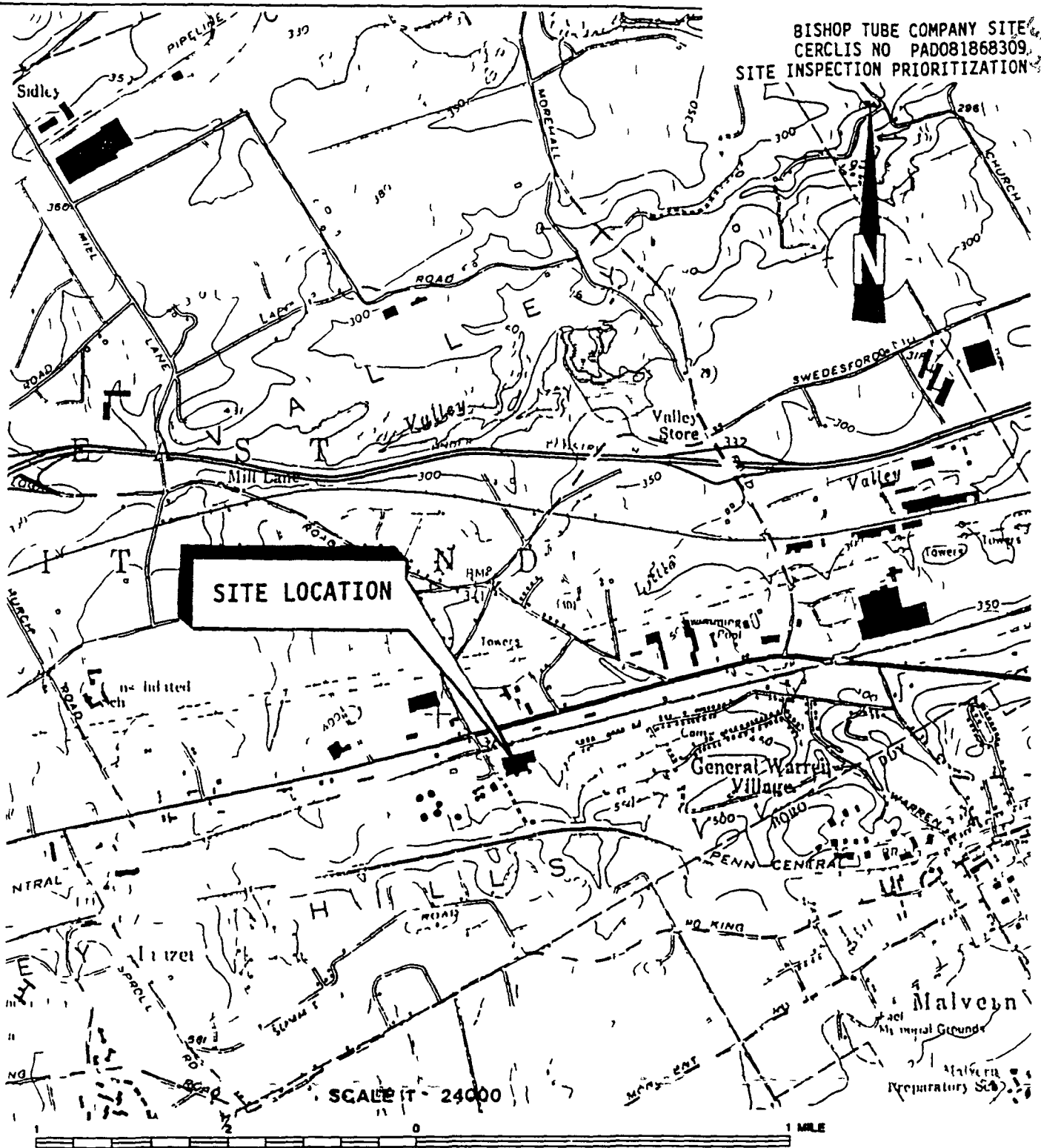


MAJOR  
PROGRAMS  
DIVISION

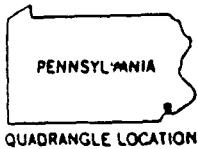
TDD Number 4410-0145  
PCS Number 1145



BISHOP TUBE COMPANY SITE  
CERCLIS NO PAD081868309  
SITE INSPECTION PRIORITIZATION



SOURCE USGS TOPOGRAPHIC MAPS,  
MALVERN, PENNSYLVANIA QUADRANGLE



QUADRANGLE LOCATION



**TETRA TECH, INC.**

FIGURE 2-1  
SITE LOCATION MAP  
BISHOP TUBE COMPANY SITE  
FRAZER, CHESTER CO, PA